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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,510	08/04/2003	Tadashi Okamoto	03500.015961.1	1267
5514	7590	09/21/2006	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			FORMAN, BETTY J	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

1634

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/634,510

Applicant(s)

OKAMOTO ET AL.

Examiner

BJ Forman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11-14 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

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## **FINAL ACTION**

### ***Status of the Claims***

1. This action is in response to papers filed 26 July 2006 in which claims 11-14. The amendments have been thoroughly reviewed and entered.

The previous rejections in the Office Action dated 26 January 2006 are withdrawn in view of the amendments. Applicant's arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections and new grounds for rejection. New grounds for rejection, necessitated by the amendments, are discussed.

Claims 11-14 are under prosecution.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 is drawn to the method of Claim 12. Claim 12 defines the labeling compound as being added to the probe terminus during a final step of sequential synthesis. Claim 13 defines the labeling compound as being directly bonded to the substrate during a first step of synthesis. Hence, the labeling compound as defined in Claim 13 conflicts with the definition of labeling compound as defined by Claim 12. Therefore, Claim 13 is indefinite because it is unclear whether the same or a different compound is being defined. It is suggested the claim be amended to clarify as defined by the specification.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Cass et al (U.S. Patent No. 6,312,906, filed 14 January 2000).

Regarding Claim 11, Cass et al disclose a method of measuring an amount of probe in a probe array, wherein the array comprises a plurality of probe immobilized at a plurality of matrix sites and are synthesized at the sites to a desired length (Column 10, lines 49-66), each of the plurality of probes is different from each other and a labeling compound is coupled to each terminus of the probes in a final step of synthesis (Fig. 1, Column 8, lines 63-67) the method comprising the step of measuring the amount of labeling compound at each of the matrix sites wherein all the probe forming the matrix are labeled at the terminal nucleotide (i.e. amount of quenching is measured thereby determining probe amount of probe present, Examples 1, 3-4 and Claims 1-4).

Regarding Claim 12, Cass et al disclose a method of evaluating an amount of target comprising the steps of reacting a probe array and target, wherein the array comprises a plurality of probe immobilized at a plurality of matrix sites and are synthesized at the sites to a desired length (Column 10, lines 49-66), each of the plurality of probes is different from each other and a labeling compound is coupled to each terminus of the probes in a final step of synthesis (Fig. 1, Column 8, lines 63-67) measuring the amount of labeling compound at each of the matrix sites (i.e. amount of quenching is measured thereby determining probe amount of

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probe present, Examples 3-4) measuring an amount of labeled target captured by the probe and comparing the amount of probe to the amount of labeled target (Example 1, Claims 1-4) wherein all the probe forming the matrix are labeled at the terminal nucleotide (Fig. 1).

Regarding Claim 13, Cass et al disclose the method wherein a labeling compound is directly bonded to the substrate at a predetermined matrix site on the substrate surface during a first step of synthesis (e.g. a fluor-quencher is linked to the surface during substrate synthesis/preparation, Column 9, lines 58-63) and wherein the amount of labeling compound coupled to the probe is compared to the amount of labeling compound bound to the substrate (i.e. amount of quenching is measured thereby determining probe amount of probe present, Examples 1, 3-4)

Regarding Claim 14, Cass et al disclose a method of evaluating an amount of target comprising the steps of reacting a probe array and target, wherein the array comprises a plurality of probe immobilized at a plurality of matrix sites and are synthesized at the sites to a desired length (Column 10, lines 49-66), each of the plurality of probes is different from each other and a labeling compound is coupled to each terminus of the probes in a final step of synthesis (Fig. 1, Column 8, lines 63-67) measuring the amount of labeling compound at each of the matrix sites (i.e. amount of quenching is measured thereby determining probe amount of probe present, Examples 3-4) measuring an amount of labeled target captured by the probe, wherein a labeling compound is directly bonded to the substrate at a predetermined matrix site on the substrate surface during a first step of synthesis (e.g. a fluor-quencher is linked to the surface during substrate synthesis/preparation, Column 9, lines 58-63) and wherein the amount of labeling compound coupled to the probe is compared to the amount of labeling compound bound to the substrate (i.e. amount of quenching is measured thereby determining probe amount of probe present, Examples 1, 3-4) and comparing the amount of probe to the amount of labeled target (Example 1, Claims 1-4) wherein all the probe forming the matrix are labeled at the terminal nucleotide (Fig. 1).

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### **Conclusion**

7. No claim is allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

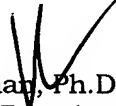
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

  
BJ Forman, Ph.D.  
Primary Examiner  
Art Unit: 1634  
September 18, 2006